

# Interconnect Fabric Module

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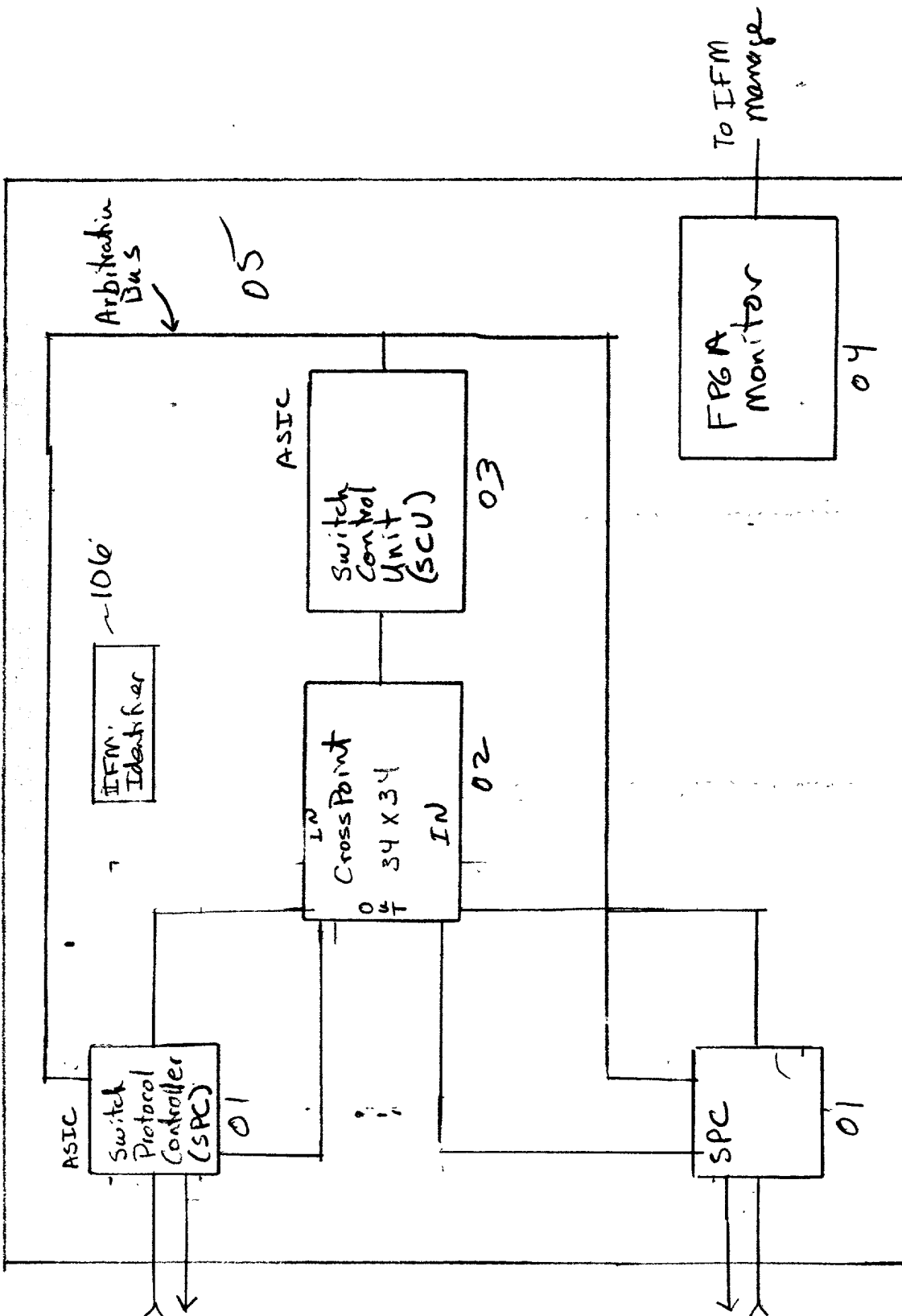


Fig 1

TOP SECRET 22594001

# Switch Protocol Controller (SPC)

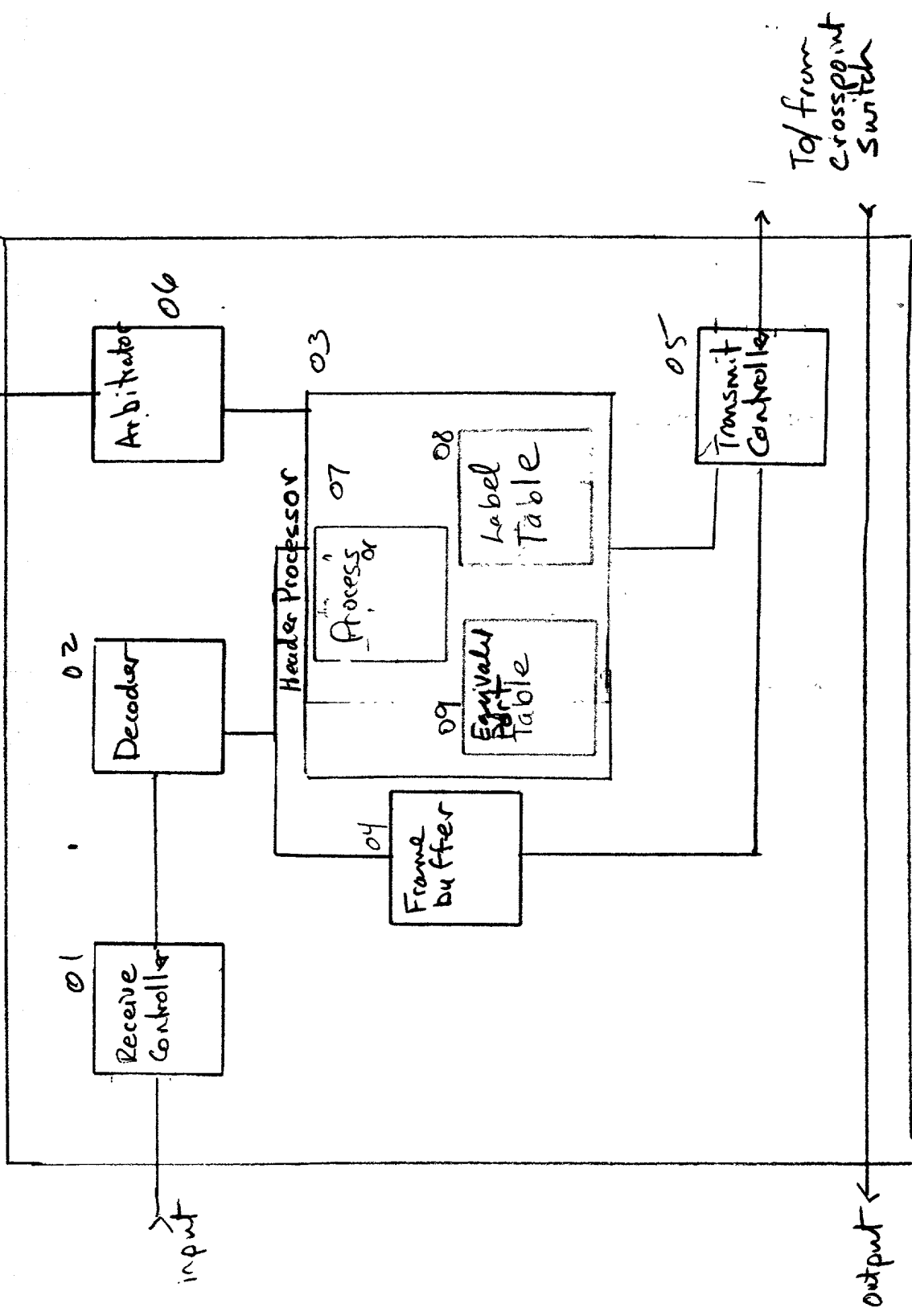
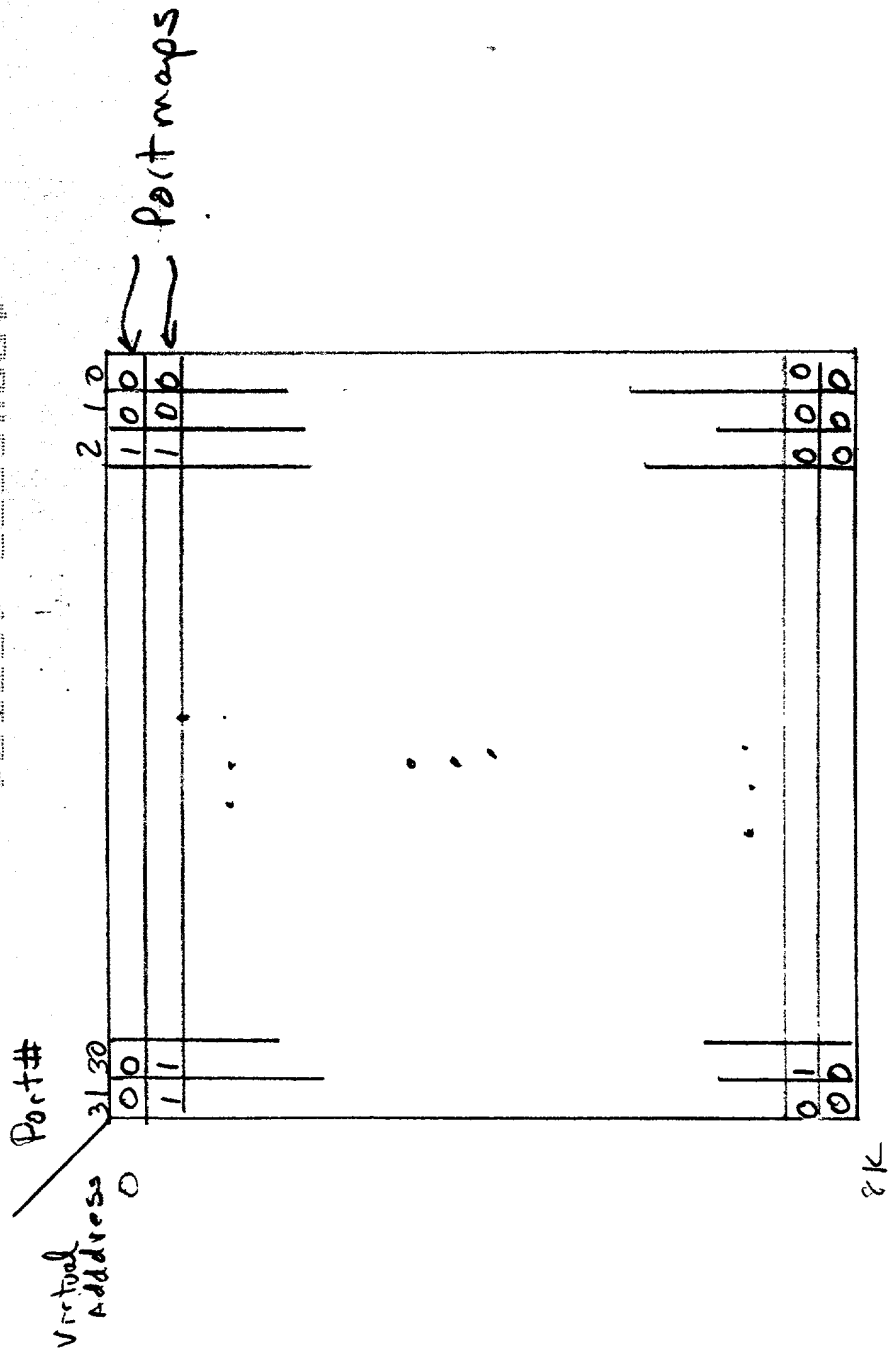


Fig 2

Label Table = 1004572 ✓ start



M  
∞  
L

# Frame

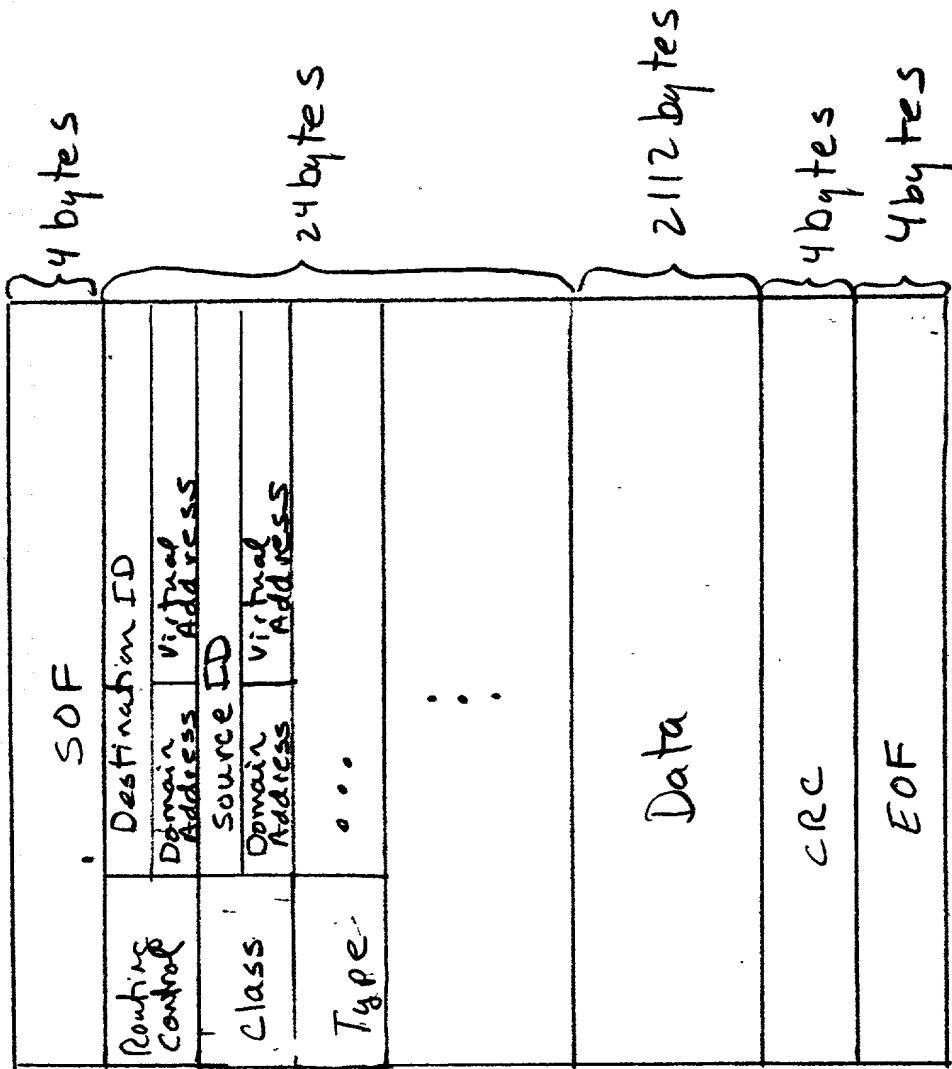


Fig 4

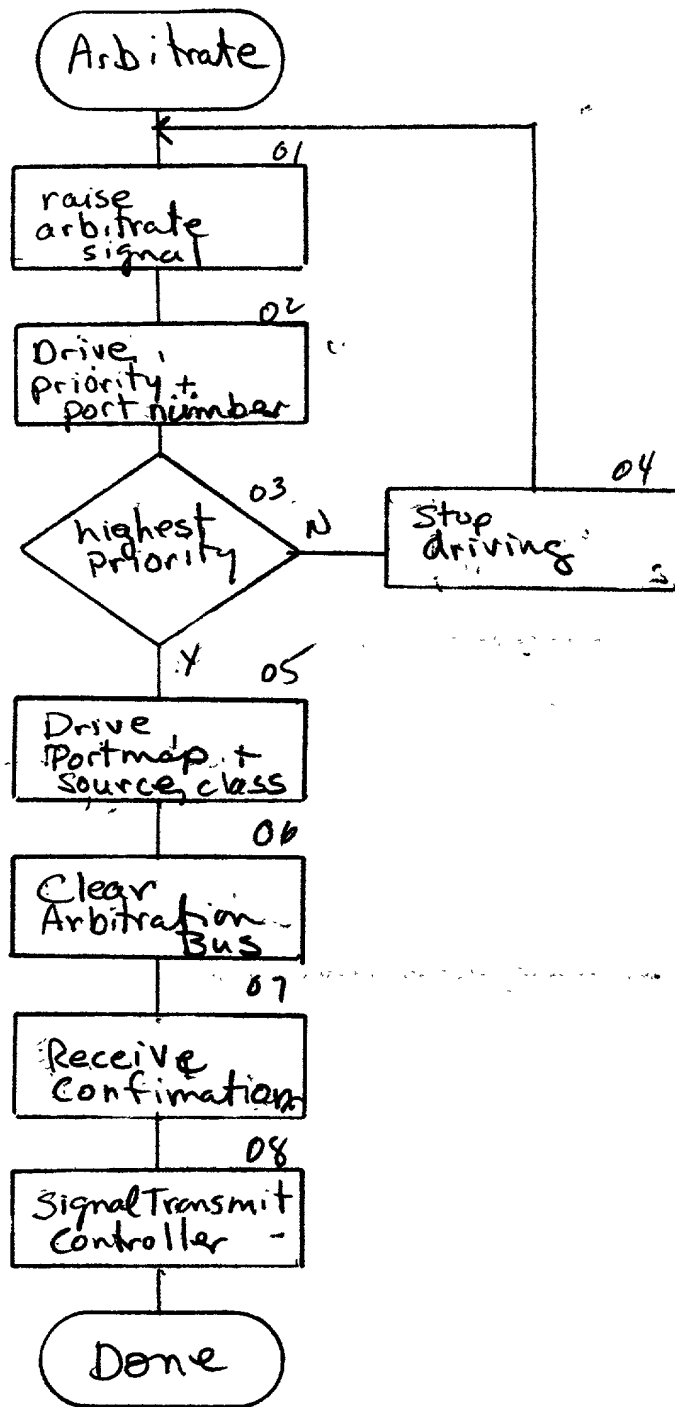


Fig 5

# Transmission Controller

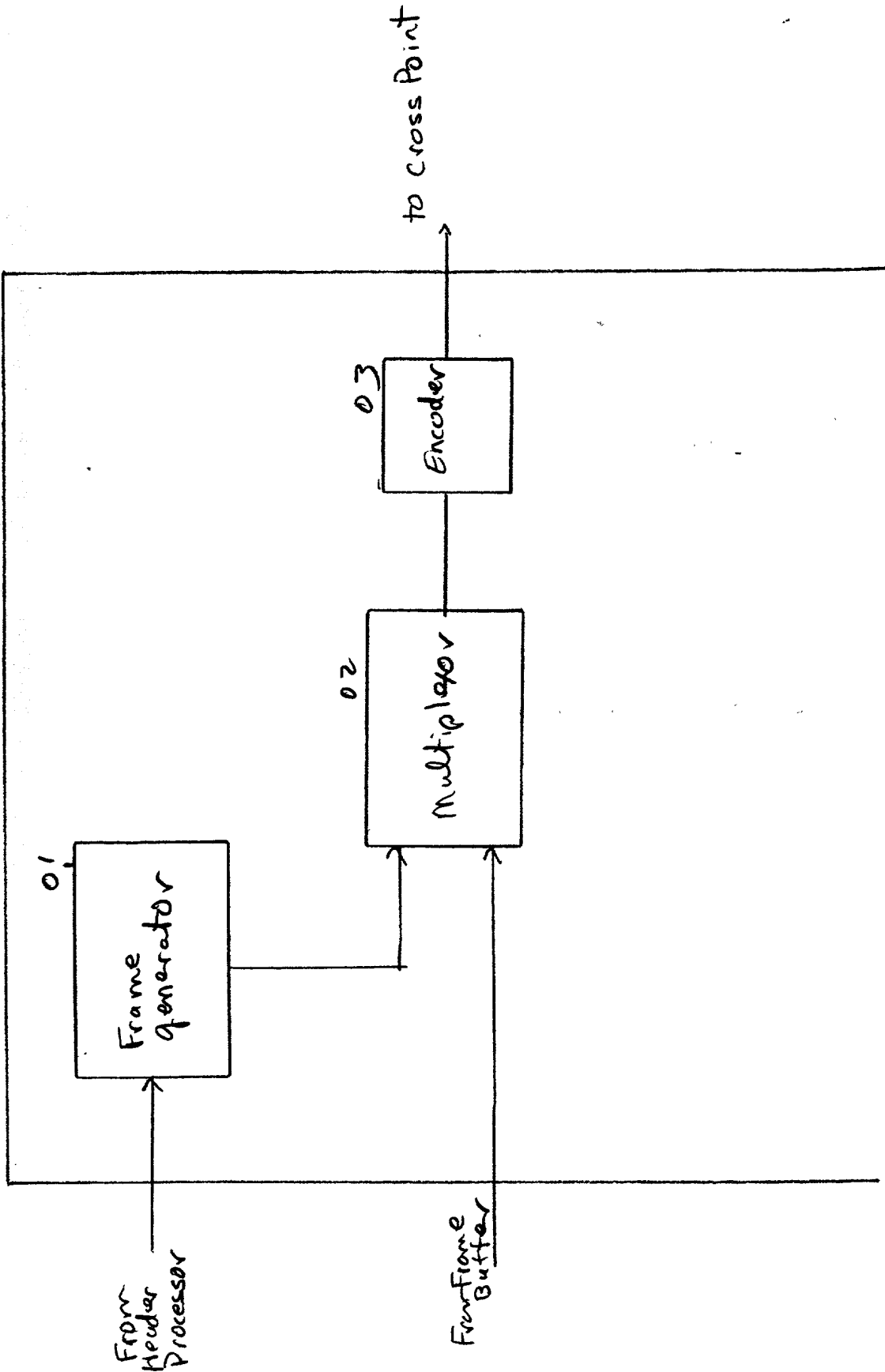


Fig 6

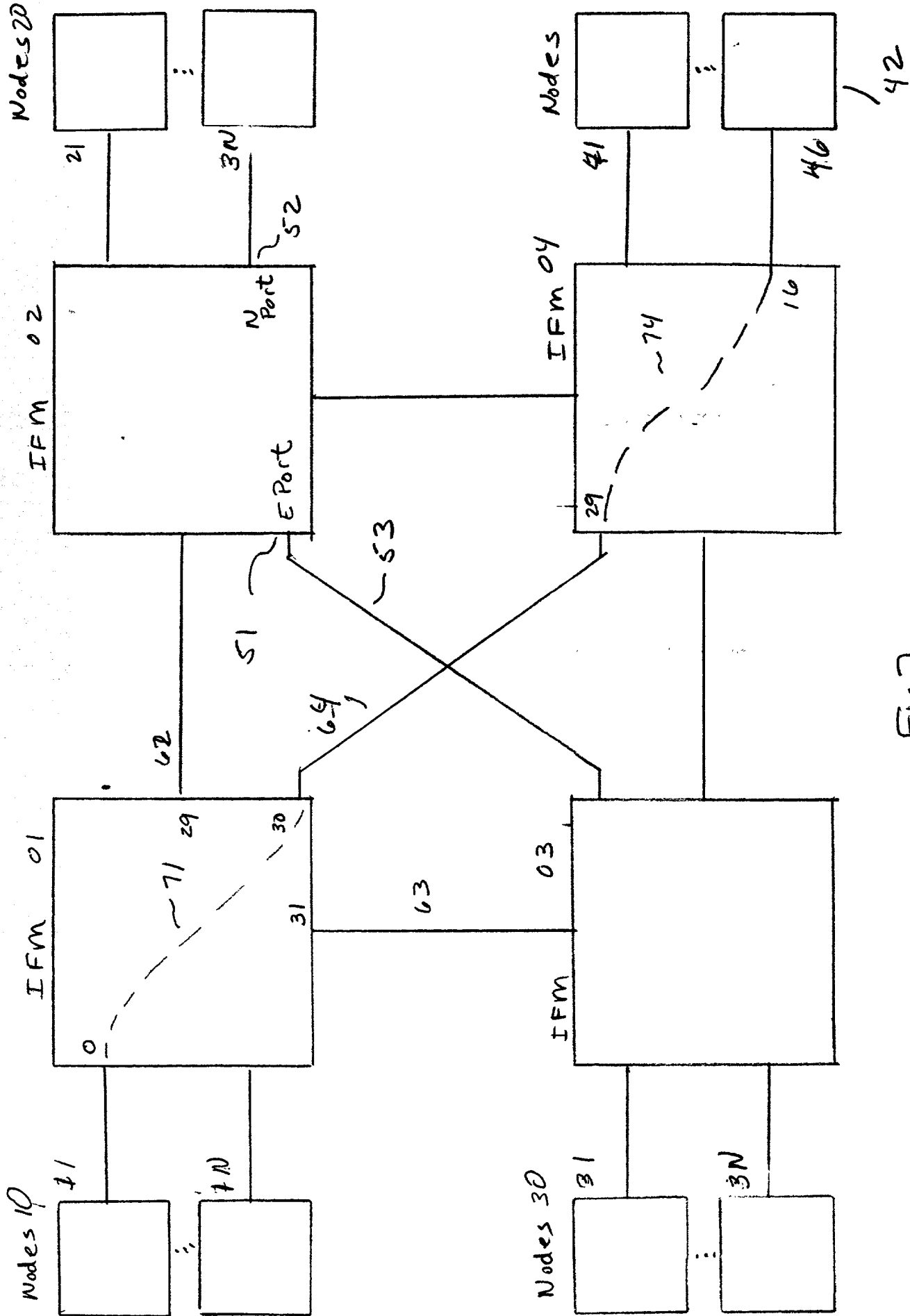


FIG 7

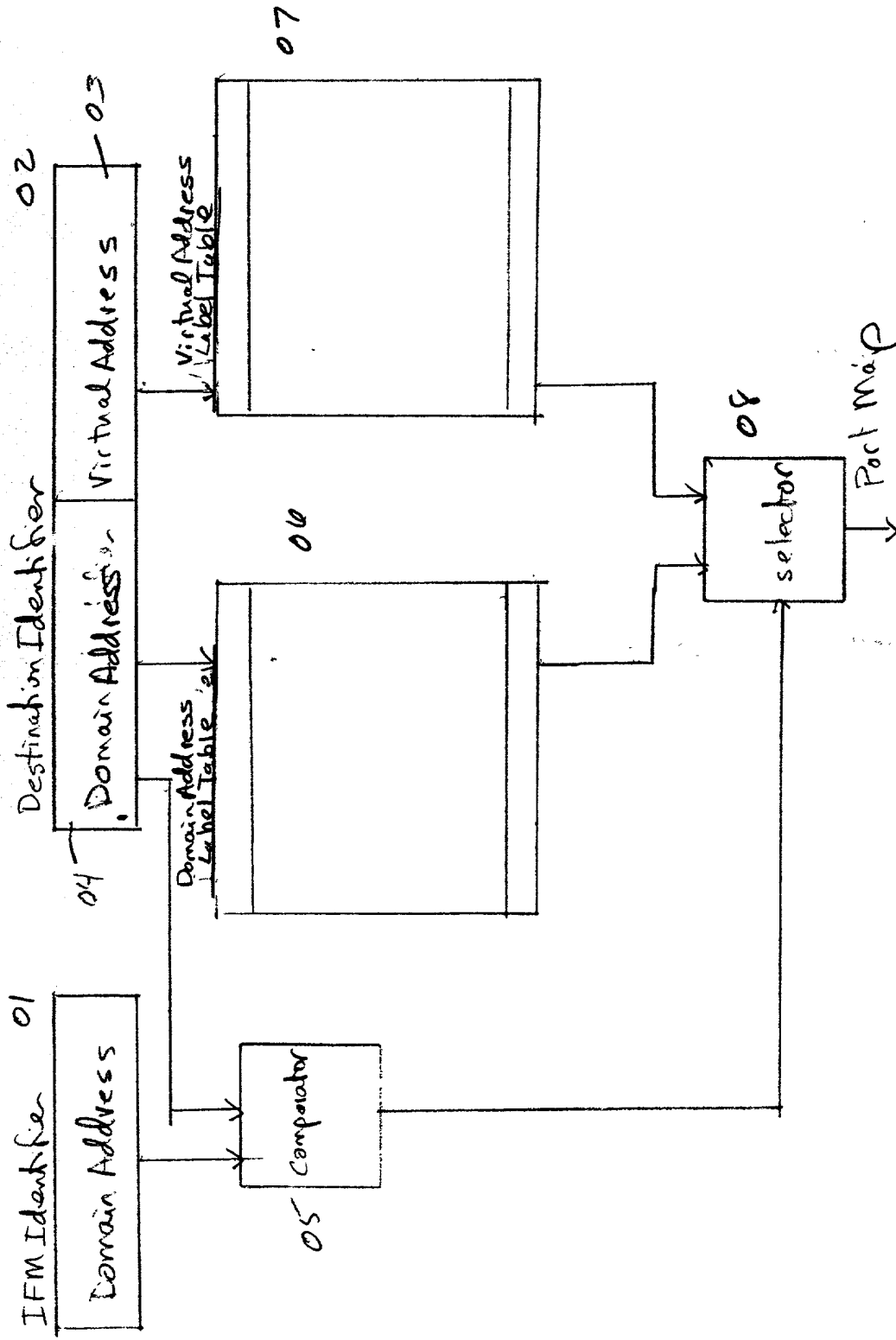


Fig. 8



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# Quad Switch Protocol Controller

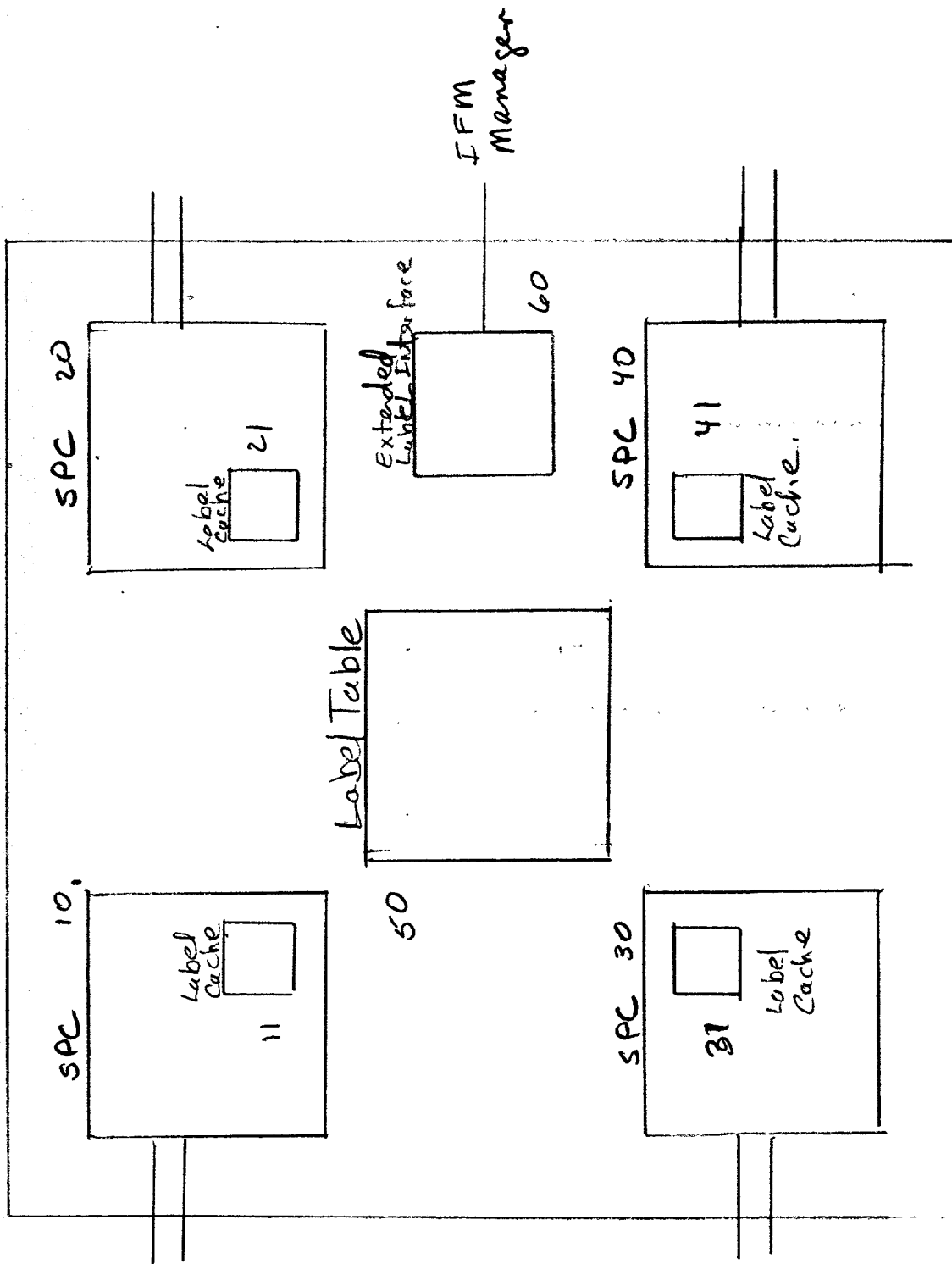


Fig 9

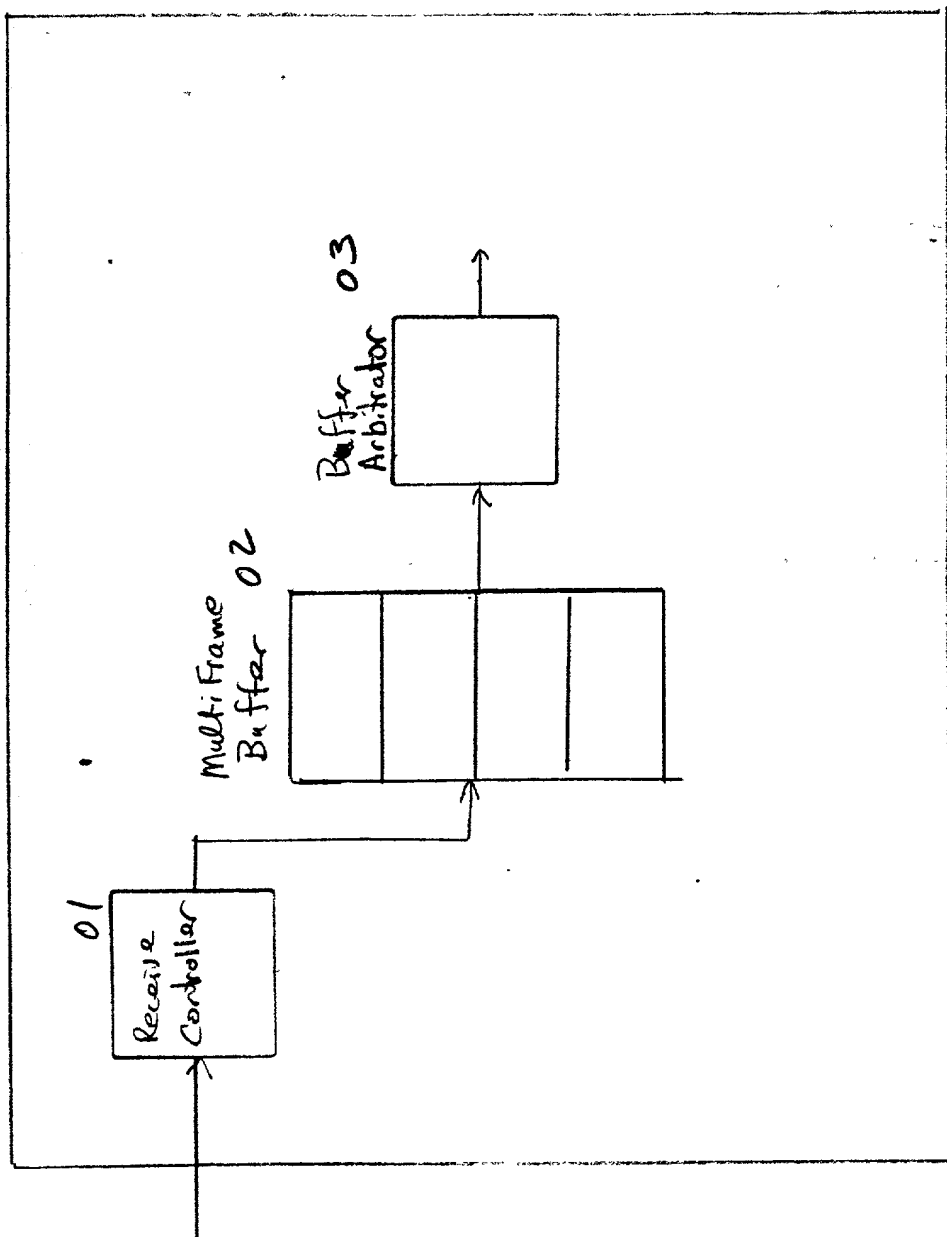


FIG 10

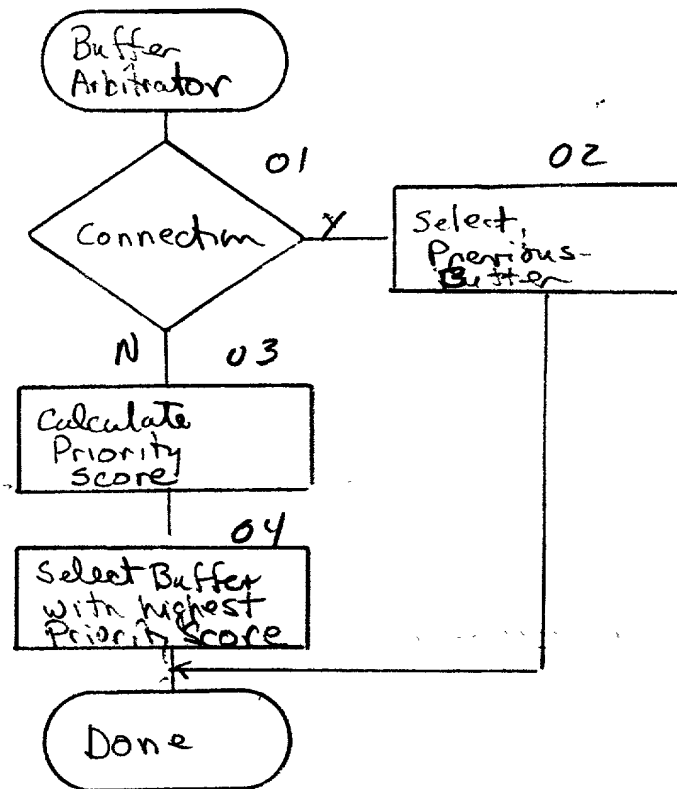


Fig 11

10046572-10601

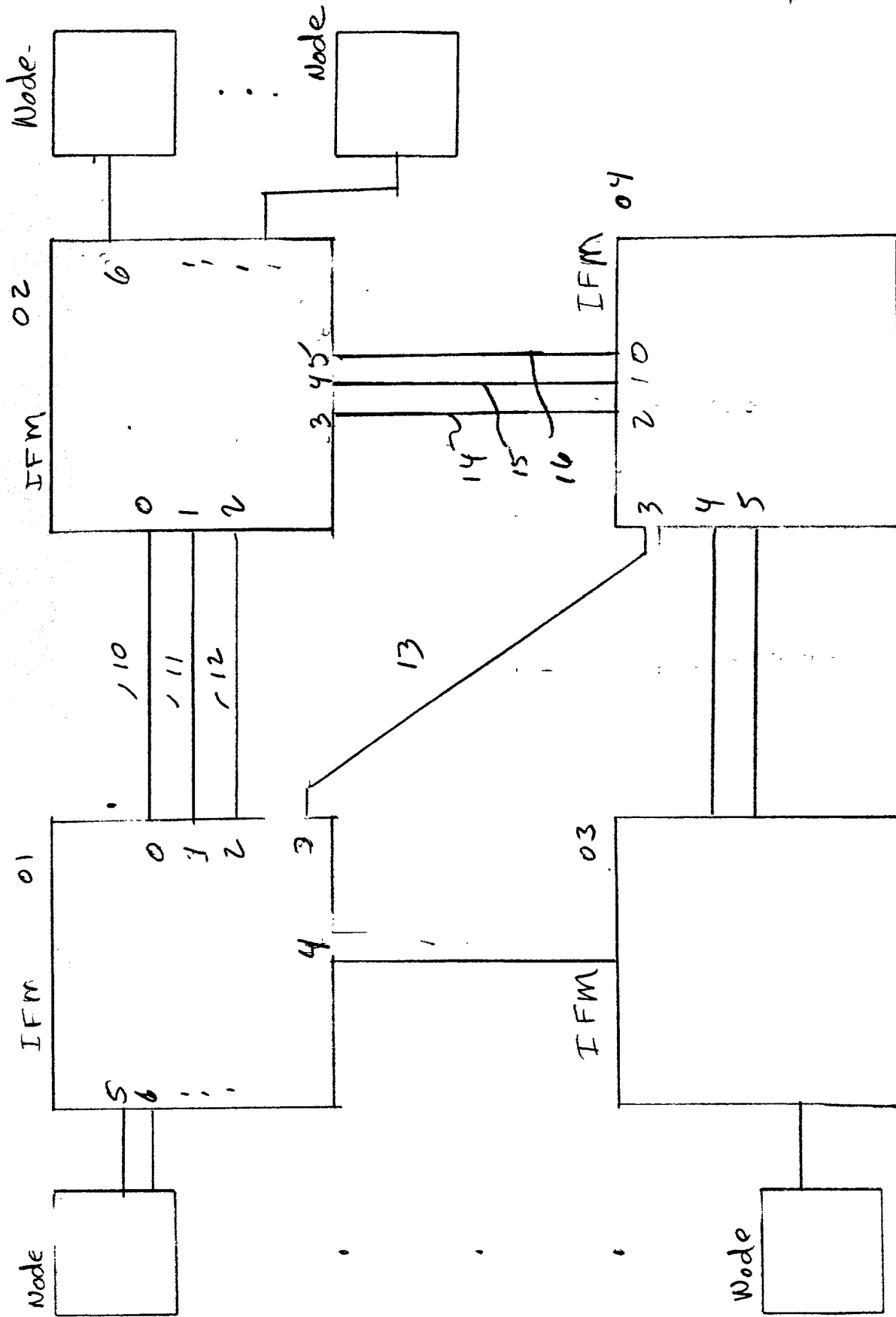


Fig 12

Diagram illustrating a port mapping system:

- Virtual Address** (01) is input to the **Virtual Address 02 Label Table**.
- The **Virtual Address 02 Label Table** outputs an **input Port map** to the **Equivalent Port Service** block.
- The **Equivalent Port Service** block outputs **Port Status** (32) and an **output Port map**.
- The **Equivalent Port Service** block also receives input from the **Equivalent Port Table** (31).
- The **Equivalent Port Table** (31) is a 4x4 grid with the following values:

	0	1	2	3
0	0	1	1	0
1	0	1	0	1
2	0	0	1	1
3	0	1	1	1

The **Equivalent Port Table** (31) outputs an **equivalent port map** to the **Equivalent Port Service** block.

Fig 13

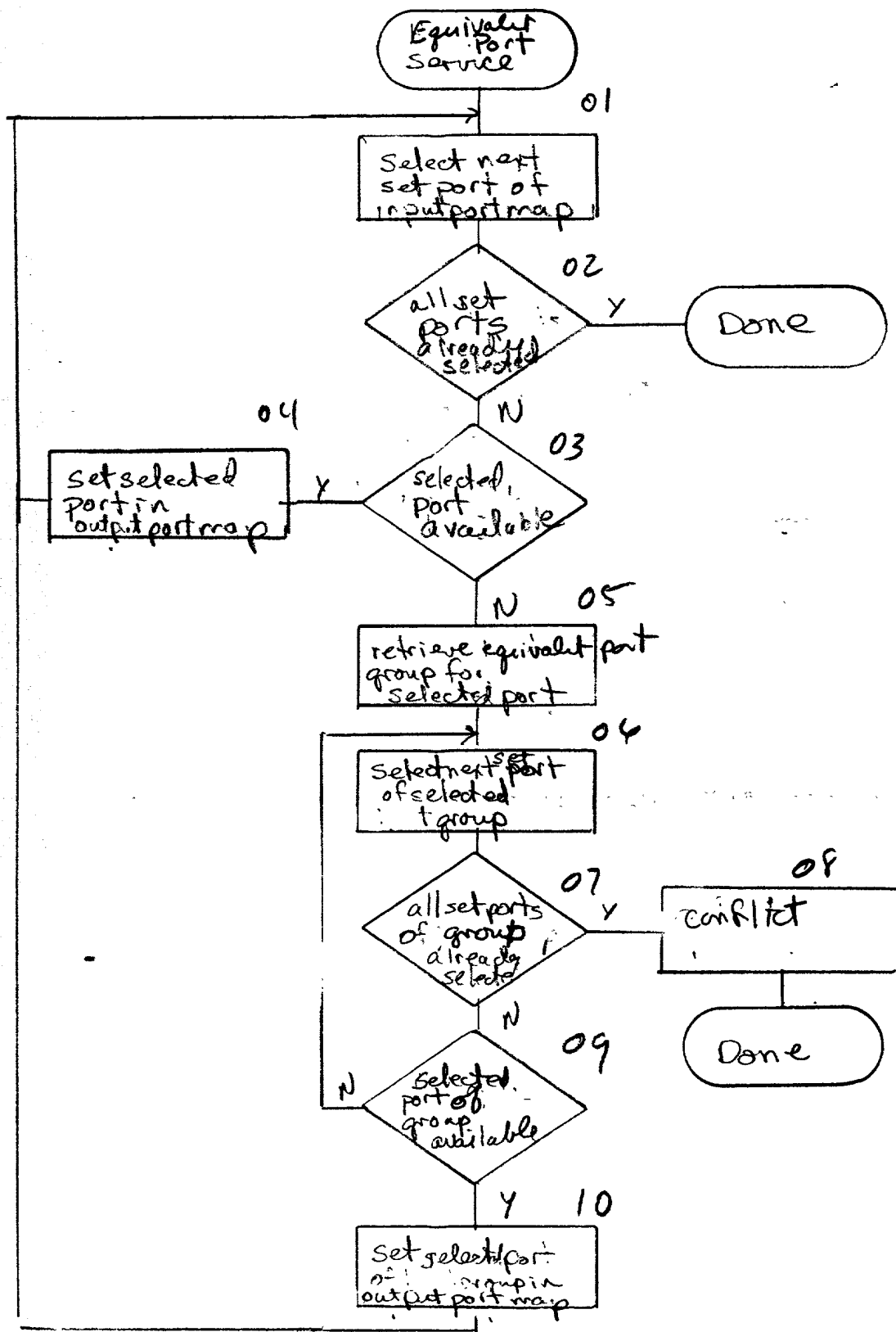


Fig 14

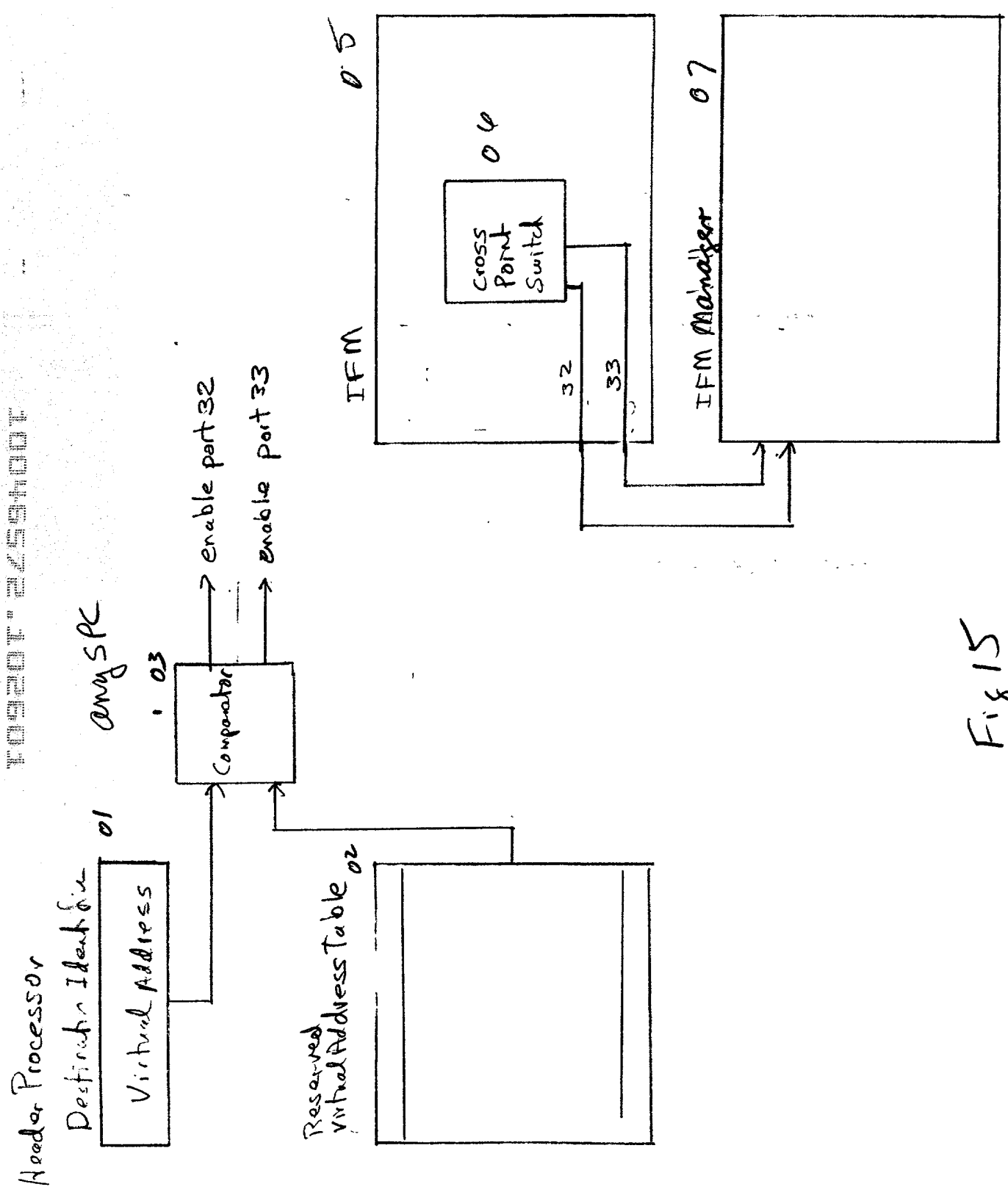
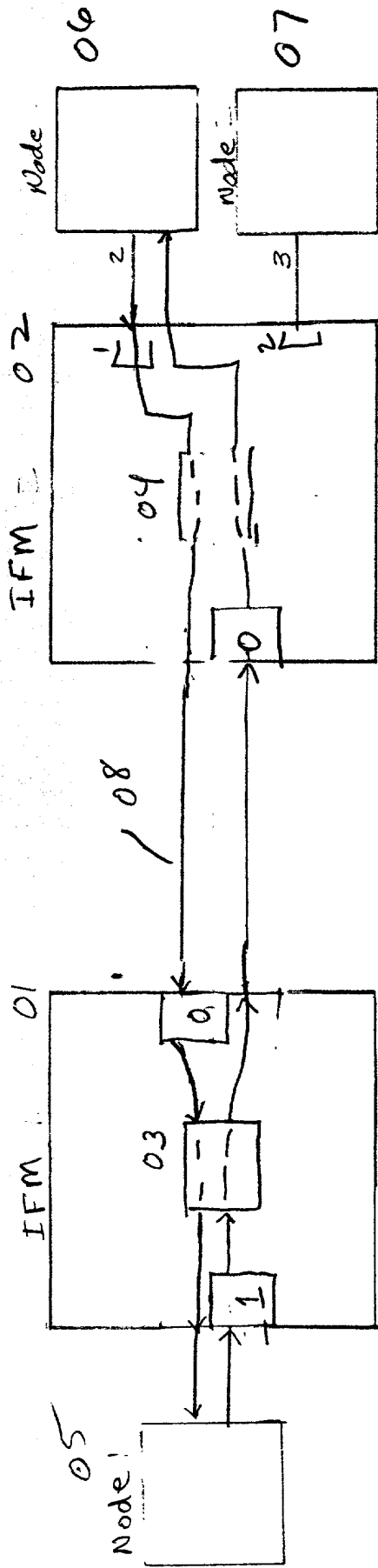


Fig 15



Dead lock

10

Time Node 1405 IFM 1601 Node 1406 IFM 1602

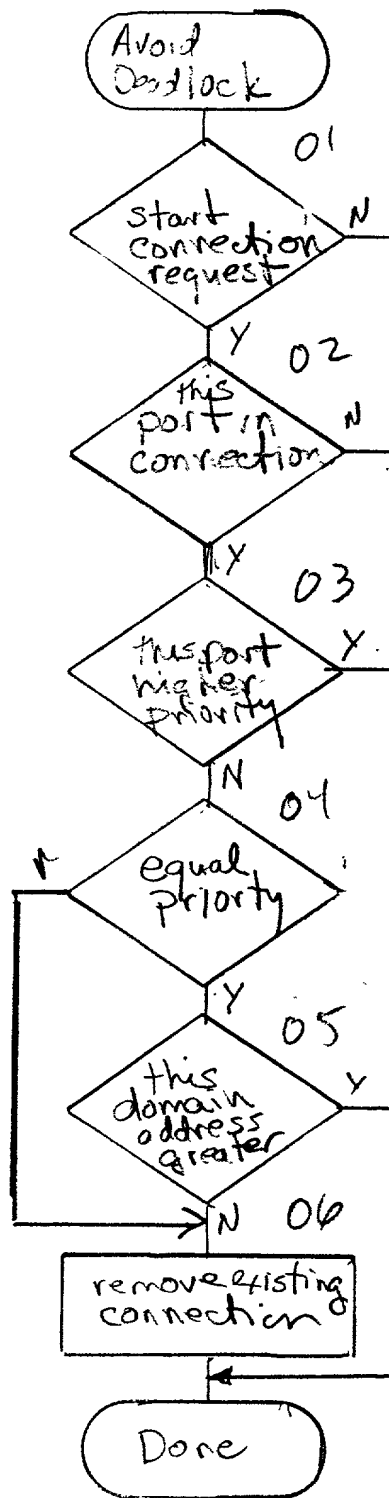
0 Send start connect?

Send start connect?

1	Connect 1 ↔ 0	Connect 2 ↔ 0
2	Forward start Connect	Forward start Connect
3	Can't forward Start connect Node 1	Can't forward Start connect

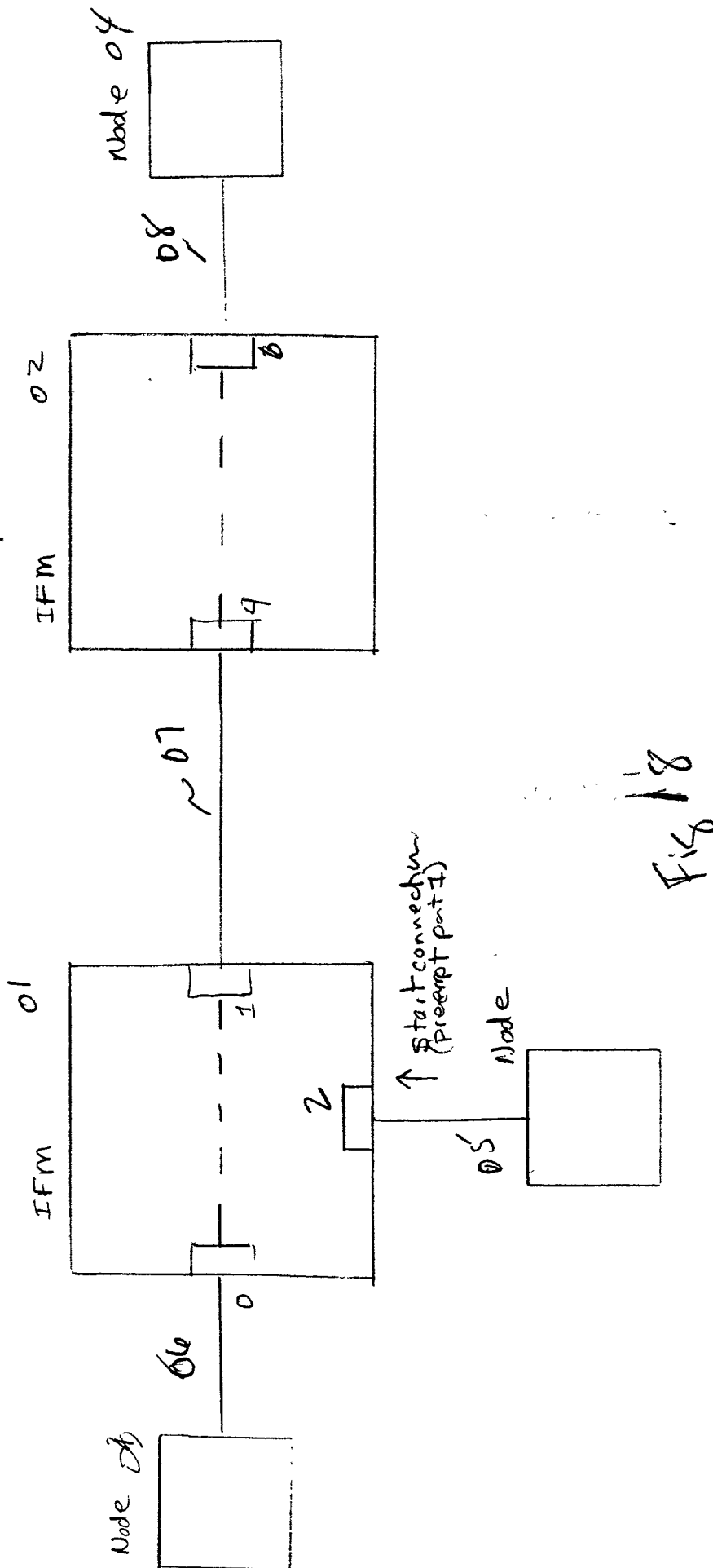
Fig 16





when end-to-end  
not established

Fig 17



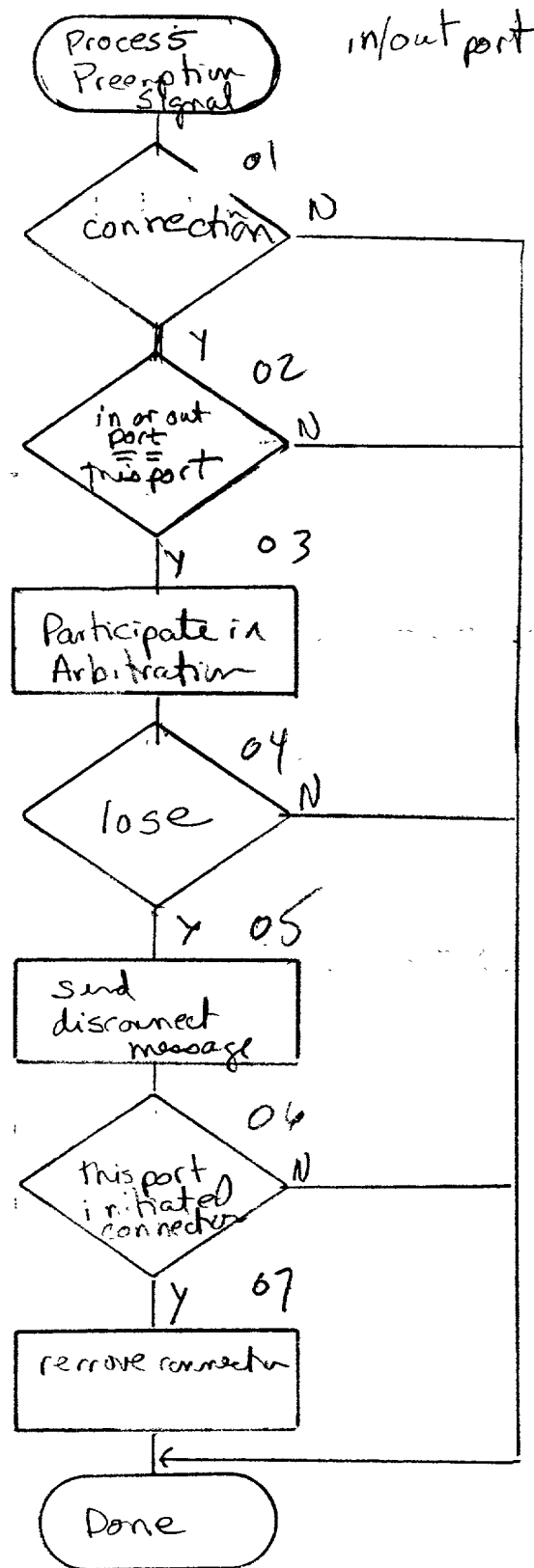


Fig. 19

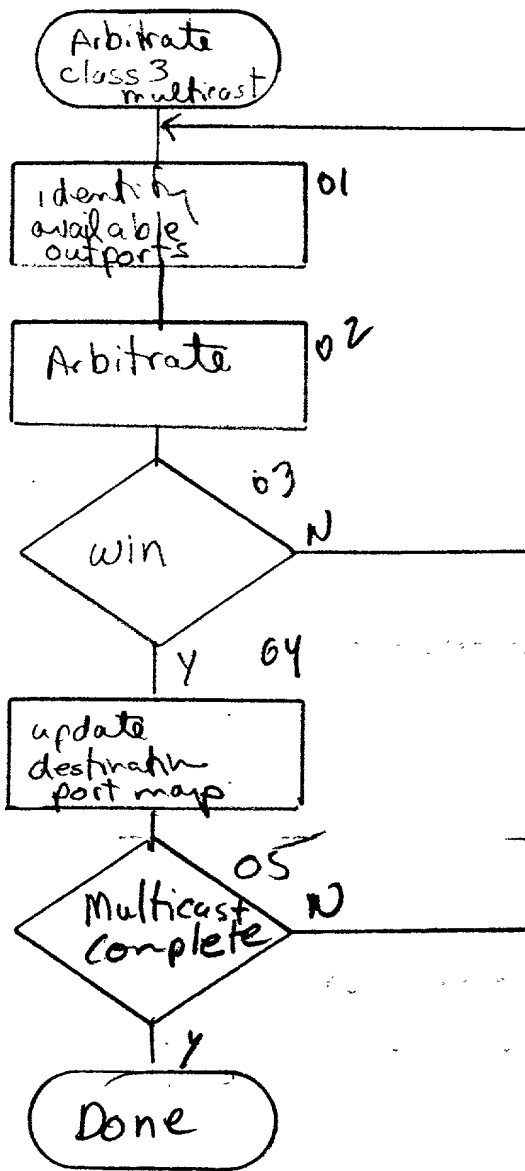


Figure 20